THE MARINE RECORD.

DEVOTED TO COMMERCE, ENGINEERING AND SCIENCE.

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AROUND THE LAKES.

CLEVELAND.

The steambarge E. B. Hale is having her machinery compounded at the Globe Iron Works. The high pressure will be 24x36 inches and the low pressure 36x36 inches.

Matthew Thomas, engineer, has been summoned to Milwaukee to testify, as an expert, in the case of collision between the Oconto and Oshkosh, which comes off this week.

The River and Harbor Committee of the House have added to their appropriation bill $2,500 for Sandusky and $25,000 for Toledo harbors. Both Erie and Cleveland have been passed by.

The arrival of the steamer H. B. Tuttle and the schooner Lucerne and Zack Chandler are among the last arrivals of the season. At the Lime Kilns, where the boards showed 14 feet 6 inches the Chandler touched bottom.

Peter Lynch and J. Sweeney are delegates from the Cleveland branch of the sailor's union, in national convention at Detroit this week. It is the intention of the union at this meeting to make an effort to extend their influence along the Atlantic coast.

O. N. Steel, engineer of the iron steamship Onoko, arrived at this port on Monday. He cites the facts that no head wind or sea prevents the Onoko from going through to her destination and that the great floating elevator is quite a favorite with grain shippers.

At the Globe drydock the tug Selah Chamberlain, received iron sheathing forward for working in ice. She came down from Lorain for that purpose. The steamer Louise, owned by Post & Co., Sandusky, engaged the dock by telephone to have a leak stopped, which was done in good style and she returned on Friday the 5th inst., picking up some fish nets on the Canadian shore.

The Secretary of the Treasury, in his report to the House of Representatives transmitting the estimates for appropriations for the fiscal year ending June 30, 1886, places the amount needed by the Cleveland harbor at $300,000. If the sum is a appropriated it will need $200,000 more to complete the breakwater recommended by the Board of Engineers and last years appropriation may become available.

The steamer Schnoor, Captain Burrows, arrived at this port yesterday from the Islands. She was compelled to put into Lorain during the severe snow squall on Tuesday. Captain Burrows, who relieved the wheelsman a few moments, was severely hurt about the head by a lurch of the steamer, which threw him over the wheel. The Oconto also ran back to Lorain during the same squall.

Captain Vader, of Lorain, master of the schooner Henry A. Kent, while in the woods to procure some timber for axe and adze helves this week, had his ankle bones broken by a blow from a tree which had been cut off and, lodging, swung around, knocking him a distance of twelve feet. The fracture being compound is very painful and will lay him up all winter.

The tug George R. Paige, of Fairport, also engaged a place on the blocks by telephone and arrived in good time for recalking and was put in good condition to go into winter quarters. The tug Mary Virginia, owned by Captain R. Greenhalgh had some small leaks stopped and received some new stern bearing brasses, preparatory to laying up for the winter. The tug Bolton also had a leak stopped.

In regard to Cleveland, the plan of opening the old river bed is under consideration by the committee, and it has met with considerable opposition, the claim being made that an outlet across the Lake Shore railroad tracks will only accomodate the few vessel owners who dump their ore along the old river bed, and is, therefore, only a local and not a general work, which demonstrates clearly that if the railroad objects to building a bridge they will not be required to do so. It is to be hoped that Representative Foran and others who desire this improvement will make their influence felt regarding the matter.

ONE of the first appropriation bills to come before Congress this winter will be that for the navy.

ASHTABULA.

Special to the Marine Record.

Mr. H. Esseltyne, of Detroit, of the firm of Merrick, Esseltyne & Co., accompanied by Captain Pete Johnson, of the schooner Mont Blanc, was here in the interest of their vessels laid up at this port, which will receive a general overhauling at Devney's shipyard. Captain Johnson will superintend the work. He is one of our most successful vessel masters, and with his large experience in rebuilding vessels, knows just what they need. Their vessels are the schooners M. F. Merrick and Reindeer.

Captain Leonard, of the Raleigh, was robbed of $200 and a watch Saturday night. A man named Harry Williams, who was with him at the time, has been arrested as the one having stolen the property. At this writing he has not had a hearing.

At present a gang of carpenters from Devney's shipyard is working on the steamer Jarvis Lord. She is receiving stanchions, chocks and bulwarks. Your correspondent was aboard of her the other day, and some top timbers and frames were exposed which are apparently as sound as when put in. The genial Captain Neville is looking after the work.

The harbor tugs at this port are all laid up for the season.

Considerable strife is going on here in regard to locating the swing bridge, which will be built across the river next season. Some are in favor of the present site of float bridge, but at that point the river is very narrow and has a sharp bend,so that by building an abutment in the channel it would be almost impossible for large vessels to get through. The county commissioners were here last week and are in favor of going down the river some forty rods, where the channel is straight and much broader. At this writing it is not decided, but will probably be at the latter point.

	1884.	1883.
Ore, tons received.....	650,000	670,000
Coal, tons shipped.....	450,000	200,000

Making a gain of 250,000 tons of coal shipped over last season, and a loss of 20,000 tons of ore received.

The steamer Leland was expected from Buffalo here Saturday, the 6th, to load coal. Cranes that were laid up, were fitted out for that purpose. At this writing she has not arrived. It could not be learned where she was to load for. A heavy gale from the westward probably caused the delay.

J. P.

TOLEDO.

Special to the Marine Record.

The case of John Jones, master of the barge City of the Straits, who was recently held in $500 by United States Commissioner Almon Hall, of Toledo, Ohio, to appear at the December term, A. D. 1884, of the United States District Court and answer the charge of perjury, in swearing that he had paid certain money due Robert A. Morrison, one of the seamen on board said barge, was presented to the grand jury and they returned no bill against him.

It is expected that during the present session of the United States District Court at Toledo, the case of the United States against Edward McNelley will be tried by Judge Welker. The action was brought to recover $80 penalty claimed due from McNelley as master of the steamer Chief Justice Waite, for failing to take out clearance papers for four trips of the Waite from Toledo to Put-in-Bay, during the season of 1882. It is grounded upon a controversy between the inhabitants of the respective customs districts of Miami and Sandusky, over the boundary line between them, thereby involving in the controversy the question as to which district the Islands belong and in which situated. Section 2,603 of the Revised Statutes of the United States, provides as follows: "There shall be in the State of Ohio three collection districts, as follows: First, the district of Miami, to comprise all the waters and shores of Lake Erie within the jurisdiction of the United States,from the western cape of Sandusky Bay to the western banks of the Miami river, in which Toledo shall be the port of entry. Second, the district of Sandusky to comprise all the waters and shores of Lake Erie, within the jurisdiction of the United States, from the western banks of Vermillion river to the western cape of Sandusky Bay, in which Sandusky shall be the port of entry. The point in dispute is, what constitutes the western cape of Sandusky Bay. The Toledo people claim Marblehead as the western cape and assert that it is the only cape of the bay. The old inhabitants of Sandusky City and its surroundings claim that for seventy years what is known as Slades Point has been admitted to be the western cape of the bay, and that a line drawn from the extreme outward point of this cape directly north, brings the islands in the Sandusky district, where they have been considered to belong for so long a time that the memory of man runneth not to the contrary.

In the case in the United States District Court, at Toledo, of Thomas F. Shaw against the scow Pidgeon, a decree was entered on the second instant in favor of the libelant's claim for wages for $62.50, and an order made for the distribution of the proceeds of the sale. The proceeds amounted to enough to pay the costs in full, and about $55 on the libelant's claim.

The cases of Wm. H. Radcliffe and others and Upson & Walton against the schooner Arabia and the barge Gaskin, having been settled and the costs being paid, entries of dismissal were ordered and entered.

FRANKFORT.

Special to the Marine Record.

The steambarge Hilton, schooners Glad Tidings and Graham Brothers sailed on December 5th; this will probably be the wind up, unless some late bird will seek shelter. A sail vessel bound south passed Saturday noon. The steamers George D. Sanford and Weston still run on the route between Manistee and Frankfort and will continue until the freeze up.

Our harbor, which was frozen over a week ago, is all clear of ice again. The weather is remarkably mild for December.

Point Betsy life station closed down December 1st. Captain Thomas E. Matthews is the keeper, and is the right man in the right place. He has a good record in the service and has made many friends. Many of the lake mariners will remember the captain.

The Frankfort pier head light is still shining its bright red light over the waters. Keeper Vorce is an old and tried mariner and knows the use of a good light.

Captain Peter McGregor, who has been running the tug Hunter Savage, at Manistee, has laid up his tug and returned to Frankfort for the winter. C. B.

CHICAGO.

Special to the Marine Record.

The propeller H. J. Jewett arrived from Buffalo, and is the last boat from the lower lakes. All the others which left ahead of her have arrived and will be laid up for the winter when they are unloaded. It is the object of the line managers to have the boats in position where they can easily reach elevators should there be a demand for storage room. It is a little early as yet for a demand for storage, but it is expected that the elevators will be filled with grain before January 1, and that lake vessels will have to be used to hold the surplus grain. The rates however, will not be as good as they have been in past years.

The tug Brothers was damaged by fire to the extent of some $800 last Sunday while lying at a dock near Harrison street bridge.

The vessel business at this port is virtually closed for this season, and almost all the vessels expected have arrived, and sailor men residing away from here have nearly all gone to their homes.

The steambarge Daisy Day will run between Milwaukee, Ahnapee and Keweenaw all the winter in the grain trade.

At Miller Brothers' drydock the steambarge A. R. Colborne, is in drydock and will have a thorough overhauling, refastening and calking; the schooner Lottie Wolf was in for calking and the tug Alpha was in for a new shoe; the barge Rutter is getting a new mizzenmast.

At the Chicago Drydock Co.'s yard the schooner John B. Wilber, Captain Travis, went into drydock for some new plank in her bottom and calking; the propeller Inter Ocean was in for new brasses and calking, the steambarge Swallow for a new wheel and new stern bearings, the tug Albatross for calking.

Alexander Keeler, aged fifty years, a deck hand on the propeller Argonaut, was killed about 6:30 p. m., Monday. The poor fellow had just come up from supper and was about to help some of the other men put on the hatches when he accidentally fell headlong down one of the hatchways into the lower hold, and sustained such fearful injuries that he died before medical aid could be procured. Keeler shipped on the Argonaut at Erie on her last trip up. The body was taken to the morgue to await an inquest. T. W.

PRESQUE ISLE.

Navigation is now closed at this port, the last boat known to be out having arrived. The light was extinguished for the winter on the 5th.

MARITIME LAW.

NEGLECT TO SHOW PROPER LIGHTS—COLLISION.

United States District Court, New Orleans. November, 1884.

Billings, Judge. The St. Louis and Vicksburg Anchor Line vs. the Red River and Coast Line, No. 11,903; Boston Marine Insurance Company vs. the Red River and Coast Line, No. 11,905.—These cases have been consolidated as depending for their solution upon the same facts. In the first there is a cross libel held. In the second there is a prayer that the owners of the other colliding boat be made party and decree to pay the whole or a portion of the loss of the insured. The litigation thus combined consists of a suit brought by the owners of the steamboat the City of Greenville against the steamboat the Laura Lee, and, a suit brought by the owners of the cargo of the Greenville, growing out of a collision between the two steamers, wherein the Greenville was sunk with her cargo, and with the cross libel, present the question upon which boat rests the liability for the damage suffered by the owners of the two boats in consequence of their collision as well as that resulting from the loss of the cargo.

The collision and the sinking took place in the early morning of the 12th of January, 1883, at some time before light, approximating to 3:30 o'clock, on the Mississippi river, at a point about eighty miles above the city of New Orleans, just above White Castle Light, and a short distance above the town of Bayou Goula. The City of Greenville was ascending, and the Laura Lee was decending the river (each on her regular voyage.)

The whole subject has been presented by voluminous testimony, has been argued by the parties on both sides with great thoroughness in regard to the facts, and, with equal research, as to the law of the case. The full study, which vocation enabled me to give the cause, has brought me to the conclusion that each of the colliding vessels is in fault upon the facts which her own pleadings admit, or her proofs establish, in that neither complied with that rule of navigation which required steamers approaching each other not to come nearer to each other that 800 yards without an exchange of understood and harmonious signals.

The rules 1 and 2 of the "rules and regulations for the government of pilots of steamers navigating the rivers flowing into the Gulf of Mexico and their tributaries adopted by the Board of Supervising Inspectors," and approved by the Secretary of the Treasury, with the amendments, March 15, 1880, are as follows:

Rule 1. "When steamers are approaching each other the signal for passing shall be one sound of the steam whistle to keep to the left. These signals shall be made first by the descending steamer."

Rule 2. Should steamers be likely to pass each other and these signals should not be made and answered by the time such boats shall have arrived at the distance of 800 yards from each other, the engines of both shall be stopped; or should the signal be given and not properly understood from any cause whatever, both boats shall be backed until their headway shall be fully checked, and the engines shall not be again started ahead until the proper signals are made, answered and understood. Doubts or fear of misunderstanding whistles shall be expressed by several short sounds of the whistle in quick successions.

The meaning of rule two is manifest. It prescribes that the distance of 800 yards shall be inviolably preserved from encroachment by either steamer until the proper signals have been "made, answered and understood." Each steamer upon knowingly coming up to the point of 800 yards from another approaching steamer must not only stop all forward revolutions of its engines, but the revolutions must be reversed till all forward motion of the vessel is overcome, and each steamer must remain thus unmoved by any forward impulse of its machinery till there is a full communication from that boat whose duty it is to give the signal, and a response which shows a comprehension of and assent to the signal on the part of the other boat. Then and not till then, may either of the approaching boats move forward toward the other.

The importance of this rule in enabling vessels to avoid disaster cannot be overestimated by the navigators, nor can it be too strongly adherded to by courts. It is a mandate which, if obeyed, may be effective in the prevention of calamity even after negligence of observation or unskillfulness in sailing or misconception of locality or of the movements of others have created or left impending danger. It requires little delay and no sacrifice upon a voyage and calls for no effect except ordinary observation, nothing except cessation of all movement. It is the last, and, if allowed, unfailing adjunct of skill, and is a care even for incompetency in navigation so far as collision of approaching steamers is concerned. The decisive questions to enable us to determine whether the rule has been observed by a boat in a given cause are: Did she come within 800 yards of the approaching boat? Did she know of this approach, and was there an exchange of understood signals?

Each party has by its proofs shown that its boat consciously disregarded this impertative, I had almost said supreme, rule of navigation.

The showing of the City of Granville is that she saw the Lee at a distance of some two miles, and still suffered herself to come within 500 or 600 yards of her without any whistle being blown or heard by her. The fact that it was the duty or right of the descending boat to select her direction and give the first signal does not change the obligation of the other boat. The ascending boat must still stop till the signals have been interchanged.

The showing of the Laura Lee is that she saw the lights of the steamer, which proved to be the Greenville, when 500 or 600 yards distant and yet did not pause, but undertook, when thus within the allowed proximity and while still progressing, to have an exchange of signals. Her reason for thus proceeding is as untenable as that of the other boat for her conduct. That reason is that she mistook the Greenville for a packet which desired to make landings on the west side of the river. The frequent liability to just such misapprehension shows the wisdom of the rule and the necessity of its rigid enforcement. The object of the rule is that each boat may learn the intention of the other, not from its own conjectures or inferences, but from the other's signals, and that collision may be avoided by substituting for hastily formed opinion easily obtained information.

If we confine the several parties to their own testimony and lay out of view every disputed fact, it appears that each of the colliding vessels knew of the approach of the other, knew that the separating distance was less than the allowed 800 yards, knew that there had been no exchange of understood signals, and, therefore, knew that there had been no common understanding as to the paths or courses of the respective vessels; each vessel, notwithstanding this knowledge, and in direct disobedience to a rule of navigation made familiar by constant application and sacredly obligatory as essential to the safety of life and property upon a river teeming with coming and going boats, continued on its course. Both boats were tending toward the same point, and collision was the inevitable consequence.

If the Greenville had completely stopped at any point between the distance of two miles, where she admits she perceived the Lee, and the 800 yards, or if the Lee had stopped even at the distance of 500 or 600 yards, when she admits she fully perceived the Greenville, the collision could not have taken place. The antecedent faults of either vessel, even if they had existed exactly as claimed by the other, would not have resulted in the disaster but for the common violation of this well known and fundamental rule of navigation. Both vessels must, therefore, be adjudged to have been guilty of fault. It follows that the damage which both vessels suffered and that resulting from the loss of the cargo of the Greenville, upon which insurance has been paid, should be divided. Let it be referred to a commissioner to report upon the aggregate loss to the two boats and to the insurance company, who are the libelants to the second suit. Upon the coming in of this report the question as to the extent of liability of the owners of each boat beyond her value will be determined, if it is presented by the values found, by the commissioner and adopted by the court.

GENERAL NEWS.

Four schooners foundered Saturday night on the Newfoundland coast, and all on board perished.

Musk rats in Tawas Lake are building their houses in rather elevated locations, which is taken as an indication of high water in the spring.

The royal yacht Alberta, which is now undergoing an overhaul at Portsmouth, is ordered to be in readiness for the Queen's use by December 15th.

The steamer Nashua has made twenty round trips through the Welland this season. At $80 cost each trip through, she has paid the Canadian government $3,200 for the privilege.

The American Steamship Company transferred at Philadelphia, recently, to the International Steamship Company, the steamer Ohio, for $181.250; steamer India, for $181,250; steamer Pennsylvania, for $181,250; steamer Illinois, for $181,250.

The bill proposing an Arkansas river commission appropriates $600,000 to be applied to improvements from the mouth to the headwaters of the river, including the improvement of the harbors of Pine Bluff, Little Rock, Dardenelle, Van Buren, and Fort Smith.

Representative Taylor, of Ohio, has introduced a bill to prohibit the removal of any honorably discharged soldier, sailor, or marine, or any widow, or dependent relative of the same from any office in the civil service of the United States, except for specified cause.

Mr. Cox, of New York, asks the president to furnish information showing the authority of law for which certain commodores of the navy have been given the rank of acting rear admiral when, as is alleged, no vacancies existed in the legal and limited number of officers of that grade, and also what public emergency, if any, existed to justify such action.

A bill has been prepared for the Reichstag, contemplating the construction of a canal between Kiel and Brunsbuttel, Elbe. The canal will permit the passage of the largest man-of-war to the fortresses and naval stations at each entrance. It will cost 122,000,000 marks and will be completed in five years. Count Von Moltke and the Emperor have both approved the scheme.

The City of Detroit made one hundred and five trips this season, which is one more than she made during the season of 1883. She commenced her voyages on the 2d of April this year, and closed them on the 3d of December. The largest number of trips made by any boat on this line in any season was by the Northwest in a season which began March 9th, and closed December 15th, enabling them to make 114 trips.

The Empire Lumber Company, of Eau Claire, Wis., has sold to Turner, Hollingshead & Co., of Lansing, Iowa, the raft boat Clyde, and made an agreement with the Lansing firm to deliver the cut of the Empire Lumber Company's mills at Hannibal, Mo., where the latter has distributing yards. The sum involved in the transaction is $80,000. The Lansing firm now has three rafting steamers.

A Cincinnati wharfboat, said to be the largest on any river, has recently procured a windlass from the American Ship Windlass Company, which has given great satisfaction, as has all the capstans in use on western and southern boats. The capstans are very attractive to steamboatmen both in finish and durability, and give the greatest general satisfaction. The above is in keeping with our knowledge of the facts on the lake and ocean ships.

The Vessel Owners' Towing Company will keep tugboats in readiness for business at Chicago all winter, and will promptly respond to all demands. J. S. Dunham will also have two boats in commission, the Morford and Mosher. The tug Alpha will be put into service again, and the tug John Gordon is being ironed off to get into shape to break ice this winter. Captain Cy Sinclair has succeeded Captain Charles M. Carle in the command of the Gordon.

There was some inquiry for winter storage room at Chicago, with shippers offering four cents and owners demanding five cents. One agent could have put in considerable room at the first named figure, but insisted on the latter. He offered to give the mere storage for two cents, and take his chances on the shipping rate next spring, but his offer was not accepted. It is very unlikely that any considerable amount of room will be taken until after the first of January, as the elevator capacity will be sufficient for any amount received for the next month at least.

The Standard's Hong Kong dispatch says that the Chinese appear to have abandoned all hope of mediation, and are determined upon a vigorous policy. Twelve men-of-war have been ordered to engage the French fleet and break the Formosa blockade. Twenty-four Germans are on the fleet, and one commands a ship under a Chinese admiral. Satisfaction is expressed, as a short and sharp campaign will make one of the combatants readier to entertain propositions of peace. The present situation is ruining trade.

The receipts of iron ore at Chicago during the season aggregated 153,854 tons, and during 1883 64,689 tons. Receipts of pig pig iron were 32,060 tons, against 22,210 tons during 1883. Receipts of salt were as follows: Bulk, 14,835 tons; sacks, 7,807; barrels, 81,505. During 1883 the number of sacks of salt received was 62,883; barrels, 175,449. The coal receipts were a little more in the aggregate than during the season of 1883. The number of tons of hard coal received here was 753,130, against 679,266 during 1883; soft coal, 236,348 tons, against 209,184 in 1883.

Moderate, thawy weather at Eau Claire, Wis., has partially stopped the exodus to the pineries, and loggers fear the small amount of snow will disappear with the warmth and leave a soft foundation for the next snow fall. Over 175 men, however, left for the upper Chippewa and Flambeau rivers, having been engaged the previous day for cutting logs at a compensation of from $16 to $20 per month, which was hard for the laboring man to swallow. The prices of provisions are proportionately low, and loggers, if inclined, can secure a heavy crop of logs this winter, at least 25 per cent cheaper than last season.

Judge Nelson, in the United States District court, has given a decision on the petitions for limitation of liability in the cases brought against the Boston and Savannah Steamship Company for damages arising from the loss of the steamer City of Columbus. He says: "The limited liability statute extends as well to claims for personal injuries suffered by passengers, as for loss of life by passengers. The insurance effected by the owners on the steamship and cargo is not an interest in such vessel and freight which they are bound to surrender for the benefit of claimants within the meaning of the Revised Statutes."

The wreck of the Daniel Steinmann, the Dutch steamer which went ashore off Sambro Light last spring, shows signs of breaking up. Dr. H. Pitts, who purchased her contents, has a large force of divers at work. The divers say the vessel has broken in two from the bridge forward, and that the starboard side has fallen on the cargo. There are now several bodies in and about the wreck. One is lying in a bunk. The body of one of the engineers is lying across the top of the cylinder with the head split open. The greater portion of the bodies are in the steerage. The prevailing opinion seems to be that some remuneration should be offered for recovering and decently interring the bodies.

The total coal shipments by lake from Buffalo for the season were 1,365,410 tons, against 1,253,940 tons for 1883, and 1,027,500 tons for 1882. The gain for this season over last year is 111,470 tons—not so large as was anticipated. In the face, however, of the general business depression consequent on the presidential election, and other untoward causes, the increase is a healthy one, and shows the growing importance of Buffalo as a coal distributing point. The average freight for the season to Chicago and Milwaukee was somewhat higher than in the preceeding season, and there were fewer changes in rates. So much coal had been contracted for delivery at Duluth before the season opened that the current rates were very low throughout the season—much under the Chicago rates, though generally they have been about 25 per cent higher than the latter. Toledo and Detroit trade, too, was dull, and rates lower than usual.

A BILL has been introduced in Congress to light navigable rivers with electricity.

RELATING TO BOILERS.

The cylinder boiler with hemispherical heads was formerly the strongest and simplest type, but as the use of steam increased, and the consumption of fuel per foot pound of work done began to receive serious consideration, engineers quickly perceived that a departure from the simple types was absolutely necessary, and began to study the form which would give best results from the fuel. To some extent this had to be gained at a sacrifice of other important considerations, and there is shown a growing preference for the fire and water-tube types of to-day, and no one can say what the boiler of the future will be. As a rule, the designs that give best economy are the weakest, most expensive to build or repair, short-lived, and difficult to examine and clean, and this, for half a century, has baffled engineers and blasted the hopes of many an inventor. Although we are, in many instances, using steam with great economy, we are not a great way ahead of James Watt in evaporative efficiency. In marine service a fraction of an ounce of coal saved per H. P. is of great importance, hence the design of boiler and furnace, on sea-going steam vessels, has been well studied by engineers. Also, the weight of marine boilers has been decreased, to some extent, by using steel in place of iron, and by simplifying the design. Some entertain a belief that modification in this direction has been pushed almost to its ultimatum, and it remains to be seen what engineers will do in future, to meet the ever increasing demand for higher steam and higher speed.

Many who have boilers in charge do not imagine the force there is harnessed by the iron shell. A boiler 60 inches diameter, 16 feet in length, having 60 fire tubes 3½ inches in diameter, and carrying 100 lbs. pressure per square inch, would be subjected to a total strain of 8.367½ tons. It this force be illustrated by a cast iron block suspended by a wrought iron rod, the sectional area required would be 1.673.5 inches, and over 46 inches in diameter, to carry the load safely. If the weight on each head was sustained by round iron rods of 50,000 lb. tensile strength, and a safety factor of five was allowed, it would require 29 rods of the size and strength mentioned to carry the load on the head.

This kind of theorizing amounts to nothing, practically, yet shows what we may expect when so great a force is instantaneously liberated, through failure of the envelope sustaining it.

Many persons have asked what becomes of the water when a boiler explodes, but a moment's thought should convince them that the water is instantly converted into steam, and deals destruction to every one in the vicinity. Pressure alone is not the only agent that has to be considered. Corrosion, incrustation and deposits can be detected and dealt with, but no one can measure, estimate, or prevent unequal expansion, except to a limited extent.—*Correspondence in Mechanical Engineer.*

SUCH CROCHETY NOTIONS.

The night was dark, cloudy and romantic as he stood under her window at the parental mansion. A rope, choke full of elopement, stretched from the window to the ground. Softly the sash was raised and her angelic form appeared at the casement.

"Is everything ready?" she whispered in a third-scene, box-set voice.

"Yes, he responded in the same theatrical tones.

"Have you the horse and buggy at the corner, a dark lantern, two revolvers, and a double-barreled shotgun?"

"Yes, yes," he replied; everything is arranged. Slide down."

"And have you hired two men to chase us?"

"Why, no; where's your father?"

"O, pa won't take the trouble. Have 't you two men engaged?"

"Why, no. What do you want to be chased for?"

"If that's all you know about an elopement I'm not going," and she shut the window down with a bang and went to bed, while the old man, who was peeking through the first-floor blinds, muttered: "Confound such crochety notions; I suppose I'll have to coal up for another winter."

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Her length is 135 feet, beam 26 feet, and hold. 10 feet 10 inches. Boiler 17 feet long. 7 feet diameter; three flues, two 16 inch and one 17-inch. Engine 22x42. Carries 240,000 feet of lumber. Speed, 11 miles light, and 9 1-2 loaded. Insurance valuation, $15,300. Address MARINE RECORD Office, No. 144 Superior street, Cleveland, O.

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INDUSTRIAL AND COTTON CENTENNIAL
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Owners and masters of vessels wishing to get cargoes of grain from this port will do well to confer with me. Will be glad to furnish information in regard to cargoes, also in relation to docks, depth of water, etc., at **Duluth, Agate Bay** (new iron ore port), **Port Arthur, Washburn, Ashland,** and all points near the west end of Lake Superior. Good gangs of men furnished on short notice for trimming cargoes of grain, loading and unloading all kinds of freight.

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☞IF YOU DO NOT RECEIVE MY MONTHLY LIST OF VESSELS FOR SALE, SEND FOR IT

LAKE SHORE & MICHIGAN SOUTHERN.

Commencing Sunday, May 11, 1884, at 12 o'clock noon the time given in the figures below is the new standard (Ninetieth meridian) time, which is thirty-three minutes slower than Cleveland time proper:

Eastward.	Arrive	Depart.
No 4, Fast Limited Express	°1 10 A M	°1 25 A M
No 8, N Y, B & A Express	°6 35 A M	°7 00 A M
No 26, Elyria Accommodation	†8 05 A M	.....
No 35, Buffalo Accm via Sandusky	†10 35 A M	†10 50 A M
No 35, Toledo Accom via Norwalk	†10 35 A M	†10 50 A M
No 12, N Y & B Fast Express	°1 55 P M	°2 25 P M
No 14, Special N Y & Bos Expres	.....	5 00 P M
No 2, Night Ex via Norwalk	9 40 P M	†10 00 P M
No 22, Night Ex via Sandusky	†9 42 P M	.....
No 26, Conneaut Accommodation	†4 25 P M	.....

Westward.	Arrive.	Depart.
No 1, Fast Limited Express	°11 55 A M	°12 05 A M
No 23, Mich Express via Sandusky	°2 15 A M	°2 35 A M
No 3, Chicago Express via "	†6 05 A M	6 30 A M
No 25, Mich Accom Norwalk	.....	†6 10 A M
No 21, Toledo Ex via Norwalk	†12 50 P M	†3 20 P M
No 5, St Louis Ex via Sandusky	†12 05 P M	12 50 P M
No 9, Chi Pac Ex via Norwalk	°6 10 P M	°6 40 P M
No 31, Elyria ac to Elyria only	.....	†4 30 P M
No 27, Conneaut Accommodation	†8 10 A M	.....

Sunday train for Nottingham—Depart 8:30 a. m. and 1:45 p. m.; returning, leave Nottingham at 9:05 a. m. and 3:45 p. m.

Reference marks—° Daily, † daily, except Sunday, ‡ daily, except Monday.

For full information as to trains and connections apply at the new city ticket office, corner Seneca and St. Clair streets, Lake Shore block.

The Nickel Plate!
NEW YORK, CHICAGO & ST. LOUIS RAILWAY.
The passenger equipment of this New Trunk Line is all new and is supplied with the latest appliances necessary to safe speedy and comfortable travel.
Trains leave and arrive at the Union Depot, Van Buren street, Chicago, and N Y, L E & W R'y depot at Buffalo.
Following is the time in effect Oct. 6, 1884, and until further notice:

GOING EAST.		LV.	AR	GOING WEST.	
	A. M.			P M.	
.....	7 50	.....	Chicago	7 50	.....
.....	9 45	.....	Valparaiso	5 42	.....
	P. M.				
.....	1 50	.....	Fort Wayne	1 50	.....
.....	2 05	.....	New Haven	1 35	.....
				A. M.	
.....	3 56	.....	Leipsic	11 30	.....
.....	4 49	.....	Arcadia	10 34	.....
A. M.					P. M
6 50	5 00	.....	Fostoria	10 22	8 50
7 35	5 45	.....	Green Springs	9 44	8 05
8 15	6 20	.....	Bellevue	9 10	7 35
10 49	9 02	AR.	Cleveland Lv	6 45	5 01
P M.					
12 05	.....	.....	Painesville	.....	3 44
12 58	.....	.....	Ashtabula	.....	2 51
1 42	.....	.....	Conneaut	.....	2 20
2 41	.....	.....	Erie	.....	1 23
					A. M.
4 19	.....	.....	Dunkirk	.....	11 24
					A. M.
5 55	.....	AR.	Buffalo Lv.	.....	9 50

Through tickets to all points are on sale at principal offices of the company at LOWEST RATES for any class of tickets desired. Baggage checked to destination
For information, call on nearest agent of the Company, or address B. F. HORNER, Gen'l Passenger Agent,
LEWIS WILLIAMS, General Manager. Cleveland, O.

BEE LINE
CLEVELAND, COLUMBUS, CINCINNATI & INDIANAPOLIS.
Commencing Sunday, November 23, 1884, trains of the Bee Line—Cleveland, Columbus, Cincinnati & Indianapolis Railway—will leave and arrive at Cleveland as follows, CENTRAL STANDARD TIME, 33 minutes slower than Cleveland time:

	Depart.
No. 3, Columbus, Cincinnati & Ind Ex	9:00 A M
No. 23, Galion & Wheeling Express	6:50 A M
No. 9, Col., Cin., Ind & St. Louis Ex	°0:50 P M
No. 5, Col. Cin., Ind. & St. Louis Express	°12 25 P M
No. 27, Galion & C.L & W. Acc	3:30 P M
No. 29, Massillon & Ulrichsville Ex	4.30 P M
	Arrive.
No. 8, Col, Cin, Ind. & St. Louis Exp	°6:40 A M
No. 20, Uhrichsville & Massillon Ex	8:55 A M
No. 2, Col. Cin. & Indianapolis Express	9:50 P M
No. 14, St. Louis, Ind.. Cin. & Col. Ex	°4:45 P M
No. 22, Galion Acc	9:20 A M
No. 26, Wheeling Accom	4:15 P M
No. 4, Col., Cin. & N. Y. Express	1:45 A M

Trains marked ° daily, all other trains daily except Sunday
E. B. THOMAS, General Manager. O. B. SKINNER, Traffic Manager.
A. J. SMITH, General Passenger Agent.
CLEVELAND, OHIO.

New York, Pennsylvania & Ohio R. R.
NEW YORK, BOSTON AND THE EAST.
The Shortest and Quickest Route to Pittsburg, Washington and Baltimore and the Southeast.
Central or Ninetieth Meridien time, 33 minutes slower than Cleveland city time.
Until further notice trains will leave from the new Central Depot, South Water street and Viaduct as follows:
7.20 a. m. ATLANTIC EXPRESS—(Daily) Pullman sleeping and hotel coaches from Leavittsburgh 9:10 a. m. to New York, Albany and Boston without change. Arrive at Meadville at 11:25 a. m. (dinner) Franklin at 12:08 p. m, Oil City 12:30 p. m, Corry 1.14 p. m, Jamestown (Lake Chautauqua) 2.12 p. m, Buffalo 5:50 p. m. Rochester 8:20 p. m.; Hornellsville 8:00 p. m. [supper]; Corning 7:25 p. m. Elmira 8:05 p. m. Binghanton 10:05 p. m., Albany 5:00 a. m. Boston 2:05 p. m.; arriving at New York 6:15 a.m.
7:20 a. m. PITTSBURGH EXPRESS — Daily — Through without change. Arrives at Youngstown 9.55 a. m., Sharon 10:55 a. m., Sharpsville 11:05 a. m., Pittsburgh 12 45 p m.
2:30 p. m. LIMITED EXPRESS—Through Pullman sleeping coach from Cleveland to New York. Arrives at Meadville at 6:30 p. m, Jamestown 8:47 p. m., Salamanca 9:45 p. m., New York 10:25 a. m.
2:30 p. m. PITTSBURGH, WASHINGTON AND BALTIMORE EXPRESS—Daily—Thro without change. Arrives at Youngstown 5:00 p. m., Pittsburg 8:00p. m., Washington 7:09 a. m., Baltimore at 8:19 a. m.
4:00 p. m. MAHONING ACOMMODATION — Stopping at all way stations, arriving at Youngstown 6:55 p. m., Sharon 7:50 p. m., Sharpsville 8:00 p. m. Daily except Sunday.
11:00 p. m. NIGHT EXPRESS—(Daily except Sunday) Sleeping coach from Cleveland to Hornellsville. Arrive at Meadville 3:25 a. m., Corry 4:59 a. m, Jamestown 5,57 a m, Salamanca at 7.10 a. m., Buffalo 9:20 a. m., Niagara Falls 11.50 a m., Rochester 12:58 p. m., Hornellsville, 11:00 a m, Corning 12:07 p. m, Elmira 12:40 p. m., Binghampton 2:19 p m., New York 9:10 p. m.
11 00 p. m. PITTSBURGH, WASHINGTON AND BALTIMORE EXPRESS — Wagner Sleeping Coach, Cleveland to Pittsburg without change Arrive at Youngstown at 2:00 a. m., Pittsburgh 5:55 a. m., Washington at 7.30 p m, Baltimore at 8 30 p m.
Trains arrive at Cleveland. 6:20 a. m, 10:08 p. m., 12:50 p. m., and 6.15 p. m.
☞This is the only route by which passengers can reach Corry Elmira, Binghampton, New York City and intermediate points without change. No change to Boston and New England Cities.
Baggage checked through to all points East
Through tickets and information regarding the route can be obtained at the office 131 Bank street, and at new Depot of N. Y., P & O. R R., South Water street and Viaduct, Cleveland, O.
A. E. CLARK, Gen'l Pass'r Ag't Cleveland, O.
J. M FERRIS, Gen'l Man'gr, Cleveland, O.
M. L. FOUTS, Passenger Agt, 131 Bank St. Cleveland.

FOR SALE,
A Fine Harbor Tug.
Dimensions of hull 65 feet over all, 16 feet beam, 8 feet hold, and measures 46 tons with 7 feet draft; can be made 6 feet draft. The engine, 18x20, is in first-class condition, with all new brasses, new rings in cylinder and turns a six-foot wheel, which was new last season. The boiler is one year old, is large enough to burn wood or coal and is allowed 100 pounds of steam. Price $4,500, and must be sold inside of thirty days. Address MARINE RECORD OFFICE.

The Marine Record.

Published Every Thursday at 144 Superior Street, [Leader Building.]

A. A. POMEROY, Editor and Proprietor.

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One year, postage paid.....$2.00
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Invariably in advance.

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Ten cents per line, nonpareil measurement, or $1.20 per inch, each insertion; four weeks $4.00; with a liberal discount on orders amounting to $40.00 or over.

All checks and drafts should be drawn to the order of A. A. Pomeroy.

Entered at the Post Office at Cleveland as second-class mail matter.

CLEVELAND, OHIO, THURSDAY, DECEMBER 11.

FURTHER LIGHT WANTED.

It is well known to all lake captains that there is a good light at Peninsula Point; it is also equally well known that there is no light at Eleven Foot Shoal, which bears south by west three-quarters west from Peninsula Point lighthouse a distance of two and one half miles, and which has in years gone by, and during the present season, proved most vexatious to vessel masters, they having no means of knowing when they have cleared the shoal except by the favorite resource of a Yankee, namely, that of guessing. The captain who is not well up in this art stands a good chance of bringing up on solid rock bottom. It is true, he has his average speed indications to rely on in case he is sailing a steamer, but he may often-time be mistaken in these from diverse causes; he also has his time reckoning from Escanaba to guide him, but this also is deficient or unreliable; if he is master of a schooner his facilities for determining when he is clear of the shoal are still less reliable; therefore, it must be seen that the lighthouse, if we can have but one at that locality, should be on the shoal, at the proper place, instead of on Peninsula Point. It is said there is quite a good channel between the shoal and the point where the light is located, on the course to Fayette from Escanaba, but that the needs of commerce do not require its use near as generally as they do the channel outside of Eleven Foot Shoal. In viewing this question, we must consider that Escanaba is by large odds the greatest ore shipping port in the world, and the tonnage that is compelled to run by this Eleven Foot Shoal under guess is enormous, therefore, it must be evident to all that every facility for safety and dispatch should be adopted by the government to insure the above requisites. We will acknowledge that during the busy season a buoy is in position at the place pointed out, but when vessels venture to make a trip in the late fall months into these waters they do not find even the small comfort of a buoy, the exact time when it would be the most useful. We also grant it is necessary to remove the buoys for their safety, and will generously dispense with them at the point referred to if the government, on the recommendation of J. W. Barlow, Colonel of Engineers, U. S. A., will build a lighthouse on Eleven Foot Shoal, to receive which a good rock bottom is ready provided.

ALL subscriptions and renewals for the MARINE RECORD, received at this office during the month of December, will be reckoned and credited from January 1, 1885, thus giving the remaining numbers of the present volume gratuitously to all new subscribers. We trust many will avail themselves of this dividend.

Notwithstanding the Detroit river, between here and its mouth, is well lighted and buoyed, there is still a long felt want, to which it would be well for the Canadian government to give their attention, and I refer especially to Fighting Island, where vast sums are expended yearly by steam and sail craft, which, despite all precautions, frequently strand and are delayed sometimes for days before released. The craft, it is true, may not sustain any injury to hull, but the cost of lighterage frequently sums up to hundreds of dollars. A light should be located on the northwest point, at the head, and the owner of the island informed me quite recently he would make a free grant for such a purpose. This obstacle once surmounted, I know of no other impediment to a free navigation throughout its whole length. It is hoped that papers will give this matter the attention it so justly deserves.

THE primary work, says Science, of our hydrographic office is the publication of charts, based on original surveys of distant coasts, by officers of our navy; but at present we take only a small part in this form of maritime exploration. During the past year, only one vessel has been engaged in such surveys. In unpleasant contrast with this, the review of hydrographic reconnoissance and surveys published annually in the English Nautical Magazine, for example, shows how largely our shipmasters must depend on British charts in their voyages. The coast-survey does admirable work on our own seaboard; but in addition to this, our government should take its proper share of the general hydrographic study of the world, commensurate with our wealth and maritime interests. New surveys of the northern coast of South America and of parts of the West Indies are urgently required, and their execution would be a well chosen initial step toward the desired increase of our trade with the Spanish-Americans.

WE see by The Chippewa County News that Dr. George A. Harding, surgeon of the medical hospital at Sault Ste. Marie has crossed the dark river. He died, November 20, at the age of 34 years. During Dr. Harding's residence at Sault Ste. Marie he has filled several important positions with credit to himself, and profit to the city. In addition to his duties as surgeon at the marine hospital at the Sault he acted as assistant surgeon at Fort Brady.

LAKE Mis'assinnie, the great new Canadian lake, is located in latitude 50° north, longitude 72° west. It is about sixty miles long and about twenty miles average breadth and contains several large islands. It communicates with James Bay, a southern extension of Hudson Bay, by Rupert river. The explorer who sailed 128 miles on this great lake without seeing the main body probably sailed in a circle around one of the large islands.

THIS government has received official notice that the revised international regulations for preventing collisions at sea have been adopted by all the leading maritime powers except the United States, which came into force on the 1st of September last. For the due protection of our shipping interest the provisions of our statutes should at once be brought into conformity with these regulations.

THE Port Huron Sunday Commercial comes to us this week in an entire new dress, the neatness of which reflects much credit upon the taste and enterprise of Messrs. Talbot & Co. They charge it to the election by a political faction, of which Mr. Cleveland is the representative.

SENATOR DOLPH has introduced a bill providing against the obstruction of navigable streams. If it carries without objectionable conditions mariners at the different lake ports will have cause to congratulate each other.

DIRECTOR GENERAL BURKE, of the World's Fair at New Orleans, announces that everything will be in readiness for opening the exposition on the 16th inst., and President Arthur has been solicited to start the machinery by electricity from Washington.

[*Continued from 1st Page*]

BUFFALO.

Captain McLeod has returned and he reports that the steamer City of Owen Sound, ashore at Michipicoten river, will be left where she is during the winter. She is in bad shape and the weather is too unsettled to do anything with her.

A new tug was launched here last Thursday. Her length is 53 feet, beam 13 feet, and depth 6½ feet. She has a fore-and-aft compound engine, built by H. G. Trout, the cylinders being 14 and 22 inches in diameter and the stroke 22 inches. Her complete cost is $6,000 and she is owned by the Buffalo & Grand Island Ferry Company. She is named S. Douglas Cornell.

The propeller Keystone has arrived at Tonawahda with lumber for Manistique, Mich. At Detroit she took in tow the schooner Fanny Neil, lumber laden from Bay City, and pulled her to Tonawanda.

It will be remembered that the Keystone and her consort, the C. J. Wells, ran on the reef at Whisky Island, only a few miles southeast of Manistique. The Keystone luckily got off after jettisoning a large part of her deck load, but the Wells remained on and has since proved a total loss. The Keystone suffered considerable damage, though she did not leak much on the way down. After discharging her cargo she will come to this port to be docked and surveyed. The Fanny Neil also had a rough experience. She was driven across Lake Huron by a snowstorm and went ashore near Southampton, losing considerable of her deck load. She was released after being on a few hours by the tug International and turned over to the Mocking Bird which towed her to Detroit. The Neil was also pretty badly damaged and she will be brought here to be laid up and repaired.

The propeller Wocoken will not go into the Union dock for a new wheel until about next Tuesday. The dock is being reserved for the Keystone.

The Ward Line propeller Toledo after all will not come to this port. Her cargo will be forwarded by rail from Detroit, where she will lay up.

The propeller Egyptian, wheat laden, arrived Friday at 9:20 p. m. She left Duluth on the morning of November 23, being twelve and a half days on the trip. She was delayed by bad weather on Lake Superior, and lost some time in towing the disabled propeller Toledo from the Sault to Detroit. She appears to be all right.

The season of navigation, as far as vessel movements are concerned, is now virtually ended at this port. The schooner Grace Murray, said to be wood laden from St. Ignace, has not yet shown up, but there is no doubt of her coming. The schooners Mary and Bay Trader yet intend to leave for near by Canadian ports to lay up. No other arrivals or departures are expected. All of the line boats are now in their winter ports.

MANITOWOC.

The tug T. T. Morford arrived here with the schooner Mineral State, which stranded on the Ford River reef some days ago. The Morford left Manitowoc for Good Harbor to release the schooner Three Bells. It is claimed that the Three Bells is a total wreck but an effort will be made to release her, just the same.

ALGONAC.

The steambarge Missouri is reported to be aground on Russel's Island, River St. Clair. The steambarge was bound up and was light. It is thought that she ran aground in the fog early Wednesday morning. The steambarge Cleveland, which was aground half a mile below Algonac, in the same river, has been released and has passed up.

CHEBOYGAN.

The tug Swain has returned from the schooner C. J. Wells, on Whisky Island, having taken off the two pumps she put aboard and all the sails, rigging, running gear, anchors and chains, and all that could be removed, and abandoned the vessel as a total wreck. Everything was in readiness and favorable for her release, when a gale sprang up Tuesday and knocked the bottom all out of her. Lumber is washing ashore.

DESERONTO.

A light appeared for the first time in the new lighthouse erected by the Government on the end of the steamboat dock on the 29th of November. It was lit by gas.

DETROIT.

Special to the Marine Record

December 9.—As far as the condition of the lakes and rivers is concerned, navigation is as yet unobstructed, and vessels might even now proceed from Buffalo to Chicago, or on a short trip in the lumber trade, with perfect safety, that is, if freights ruled sufficiently high to make the venture. This is as I predicted some two months since, as you will doubtless remember. But the time has arrived when it is customary for all kinds of craft to retire into winter quarters regardless of the ruling of freights. It has been otherwise in times past, and on one or more occasions steamers have ventured to Lake Superior with supplies, owing to bad weather preventing the shipment at an earlier period.

The tug Martin Swain, which went to the relief of the schooner C. J. Wells, but finally abandoned her, is expected here to-day. The Wells, which has become a total loss on Whisky Island, came out as one of the finest barkentines on the lakes, was built for Captain Frank Perew, at Cleveland, in 1866, was 549 tons burden and cost about $40,000. She has had various mishaps during the latter part of her career, for which there were good and sufficient reasons.

The tug Swain was the last boat to visit the wreck of the propeller Scotia, stranded on Keweenaw Point, Lake Superior, at which time she was badly broken up from her stern up to amidsips, and nearly all of the iron plates had fallen off from her bottom for that distance, so that all hopes of her recovery in the spring are thus set aside, and this fine craft is now taking her final rest.

Quite unexpectedly to her owners, the propeller Toledo returned from Lake Superior, but did not proceed on to Buffalo with her cargo. She laid up at this port and her freight was sent on by rail.

Ice commenced running in the Detroit river November 25th, during the cold snap, but has since disappeared.

The propeller Riverside, which plies between Detroit and Malden, will continue to run until prevented by ice. Baring one or two accidents, she has had a very successful season.

The Detroit and Cleveland line of steamers are snugly moored for the winter at this port. The City of Detroit has performed 105 round trips between the two ports, and the Northwest 100 round trips, neither of them meeting with a mishap, which speaks volumes for the management of the line and the skillfulness of the officers of the boats, and the same has been the record for the past two seasons.

Captain James Davidson was in this city yesterday, en route to Bay City.

The steamer City of Cleveland, plying between Detroit and Mackinaw, has made 66 round trips, and the City of Mackinac 60 round trips, with a record on a par with the Detroit and Cleveland line.

The revenue steamer Fessenden did not strip for winter quarters until to-day, as was premised. It was thought best to hold on for a few days longer in anticipation of what might happen.

The propeller Oconto and the steambarge Mackinaw with consorts are at present absent to Lake Huron for lumber to bring to this city.

A dispatch was received from Charles Whitaker, of B. Whitaker & Son, shipbrokers, this city, dated at Manitowoc, stating that the schooner Mineral State had arrived there, was not leaking a drop and that $2,200 would cover all repairs.

The tugs Andrew J. Smith and Gladiator, of Murphy Brothers' line, are both absent on duty. The former has been successful in releasing the steambarge Erin, which stranded on Keweenaw Point, Lake Superior. The latter left the Sault a day or two since to rescue the schooner Mary Battle, ashore at Eagle Harbor. She is a vessel of 375 tons burden, owned by J. Battle, of St. Catherines, and worth $15,000. This season Lake Superior has shown up her share of marine casualties, and the total loss of property on that lake will be proportionately larger than any of the others.

The schooner Harvey Bissell, owned by Murphy Brothers, of this city, is ashore at Marquette, and will remain there, it is probable for all future time. Notwithstanding a channel was dredged to her, she could not be moved. It is safe to predict that not one

of the wrecks ashore on that lake and exposed to bad weather will ever float again. Lake Michigan, in the past, has usually exhibited the greatest losses of all the lakes, but this season she must yield the palm to the iron ore region.

The harbor tugs at this port have gone to their winter's rest after rather an unprofitable season's business. Opposition stepped in, and notwithstanding the business was hardly sufficiently remunerative to the first party, others came along to share in the glory, and it may be presumed they got but a small percentage of it, for it is a fact pretty well established that vessel captains are no respecters of persons, as the adage goes, and consequently do not feel pledged on either hand.

Captain Ward informed me to-day that the steamer S. F. Hodge will winter at Duluth, where she is at present.

The lake Seamen's Union are holding their annual convention in this city, organizing yesterday, President Powers, of Chicago, being chairman of the proceedings. Yesterday was taken up with preliminary work. There is a fair representation present.

The machinery of the tug Phœnix, burned a short time since at Malden, has been sold to J. A. X. Campbell, of Windsor; price not stated. She is now being raised and will be brought to Detroit, when her engine will be taken out.

Sometime during Sunday night or early Monday morning the watchman on board the tug Bob Hackett thought he heard sombody rumaging around in the hold, and went to investigate when he saw a man leap to the deck and make his escape. On examination, bunches of shavings saturated with coal oil and other inflammable debris were found. The engineer and owner, Allen McKea, met yesterday in Windsor, when a passage at arms took place, the engineer coming out second best. The tug lies moored below Windsor and is heavily in debt.

Murphy Brothers' tug International, arrived here Saturday night with the steambarge Tecumseh, which she had released from Mitchell's Bay, after fourteen hours' dredging. Much credit is due in the rescue of this craft, as it was thought she would have to be abandoned.

The tug Martin Swain arrived here this morning from the Straits.

The tug Charlton has gone to the relief of the steamer Owen Sound, stranded on Lake Superior.

The propeller W. A. Haskell, of the Ogdensburg and Lake Champlain line of steamers, struck a rock in the St. Lawrence river on Wednesday, when about two miles from Chippewa Bay. She began leaking quite rapidly, and Captain Millen immediately ordered the two ten inch pumps, which are in the forward part of the propeller, to work, and she was run about two miles in Chippewa Bay, where she settled on the bottom in sixteen feet of water. As soon as she rested quite heavily on the muddy bottom the leak stopped. A. McVittie, of the Detroit Drydock received a dispatch saying that the propeller had been pumped out and would proceed to Ogdensburg, which was her destination. This is the first mishap that the Haskell has met with this season. The Haskell, valued at $125,000 and classed A1*, is one of the finest propellers afloat on the lakes. Her keel was laid at the Detroit Drydock last fall, and she was launched quite early this spring. The dispatch states that the cargo was only slightly damaged. The $50,000 insurance on the propeller expired November 30th, and was not renewed. The damage, however, will be slight.

The steambarge Mackinac arrived at Detroit last Thursday, with her consort, the Genesee Chief. The Mackinac is loaded with coal for Port Sarnia and Marine City. After discharging her cargo the steambarge will proceed to a Lake Huron port and load lumber for Detroit. Her consort will lay up at this port. J. W. H.

KELLEYS ISLAND.

The propeller H. C. Schnoor cleared on Monday on her sixtieth round trip with stone between here and Cleveland. She carried nearly five hundred tons each trip. Her up freights nearly pay the fuel bills. Captain Burrows and his crew won golden opinions here for their gentlemanly conduct this year and last.

The American Eagle is making her usual daily winter trips between the islands and Sandusky.

OGDENSBURG.

S. S. Rogers, Lisbon, has purchased the yacht Wanda, which has run on the river here the past two seasons. She had been hauled out and placed in winter quarters, near the ferry dock, but was again launched and taken to Cardinal.

The revenue steamer Bibb went out of commission on Wednesday, the 3d inst. The crew was discharged and the officers placed on waiting orders, except Captain Constable who remains in charge of the vessel. Second assistant engineer Owen received orders to proceed to the revenue cutter Dexter at Newport, Rhode Island, and report for duty.

The propeller William A. Haskell, of the Chicago and Ogdensburg line, struck a rock about two and one-half miles above Chippewa Bay Wednesday morning. The pumps were sounded and it was found she was making water very fast. She was immediately run into shoal water, and now rests in 16 feet on mud bottom a mile and a half above Chippewa Point. The Haskell was built last winter by the Detroit drydock company. Her dimensions are: Length, 244 feet; breadth, 37 feet; depth, 16 feet 6 inches. She was commanded by Captain L. D. Miller, of Cape Vincent. Her cargo consisted of 18,000 bushels of wheat, from Chicago, and 1,000 tons of freight, mostly bran and shorts, from Milwaukee. The tug Curlew, with a lighter, a steam pump and 16 men was sent to her assistance Wednesday evening. The insurance on the vessel and cargo expired Nov. 30, and we are unable to learn whether it was renewed or not. The tug Proctor with a barge left here Thursday afternoon for the scene of the wreck, and returned here with a barge load of the cargo. It is now thought that the most of the cargo will be saved, and but little of it damaged.

AMHERSTBURG.

The tug Stranger, Captain Jacques Laframboise, has been laid up at O. Young & Co.'s dock for the winter.

The tug International has been removing the machinery from the burned tug Phœnix, which is lying on the river bank above Duff & Gatfield's office.

The steamer Alaska has laid up for the season at Detroit. The Riverside will continue running to Amherstburg as long as the river remains clear of ice.

The Colchester Reef lightship, which was waterlogged on Bar Point during the big gale last week, has been pulled out here. Captain Hackett intends giving her a rebuild at this port, this winter.

On Monday, Duff & Gatfield brought in their lightship, which has been on the Limekiln crossing all summer. They found the ice had done great damage to the craft the previous night, almost cutting her in two.

MILWAUKEE.

The barge Chester B. Jones with her cargo of coal has been lying here for a week past, and her owners filed a libel against the cargo for the freight demurrage. The claims amount to about $1,000. The Jones was chartered at Charlotte for coal to this port at $1.20, free in and out. On arriving here the consignee refused to accept the cargo on account of some misunderstanding about the charter. The cargo was bonded, and the vessel is unloading. The case will be settled in the courts.

OWEN SOUND.

The steambarge Isaac May, from Port Arthur to Goodrich with corn, is at the Sault in a leaking condition, and with her rudder damaged. She will have to discharge her grain at the Sault and winter there. The Canadian Pacific railway steamer Alberta arrived from Port Arthur on the 3d with passengers and freight. This is the last boat of the season. She brought down the captain and the balance of the crew of the steamer City of Owen Sound. The wrecking tug that was sent from the Sault to releas her did not succeed in reaching the vessel. She went to Whitefish Point, where she remained four days, and returned to the Sault, as there was danger of her being frozen in.

HOUGHTON.

The ferry boat, Annie R. Hennes, was laid up on the 20th, having been in almost constant service since July 4.

ONTONAGON.

The tug Gillett left for Marquette, having finished her work here on the harbor contract.

KINGSTON.

The steamer Ida having been sold to parties in Toronto, the Rideau canal is again without a passenger boat, but the patrons of the route are not likely to suffer inconvenience long on that account, for a contract has been given to Captain Davis for a new boat, to be ready for the opening of navigation, which is to ply between Kingston and Smith's Falls three times a week. The proprietors of the new craft will be Captain Noonan, who sailed the Ida this summer and formerly sailed the D. C. West, and Mr. W. Bajus of this city, both well and favorably known to the people of Kingston and vicinity. The boat will be a screw wheel steamer, 75 feet keel, 16 feet beam, will run twelve miles an hour and will be will fitted up for the accommodation of passengers and freight.

The contract for releasing the schooner Julia has been let to Kingston wreckers, who will also raise the schooner Hannah Butler, sunk at Presque Isle.

The hull of the new boat being built by Robert Davis, of this city, for Captain Davis, of Gananoque, is a beautiful model. Her dimensions are: Length, 40 feet; beam, 9 feet. She will be capable of carrying forty-five passengers and will be fitted out at Gananoque. She will be ready for business early next spring.

PORT HURON.

The tug Moore has arrived from the wrecked propeller Morley at Grand Marias and reports the propeller covered with ice five inches in thickness to the forerigging. Her sides are one solid mass of ice. She lies head on the beach in a bed of sand, and is not damaged. There is a reef with twelve feet of water on it outside the Morley, and it is stated there will be no difficulty in rescuing her next spring. The tugs Gladiator and Charlton are at the Sault.

Captain George Wilson, of the E. K. Roberts, reports that the tug Smyth sunk at Green Island, Georgian Bay, by strking a rock while landing supplies for the lighthouse on Massaugau Island. She had the light keeper and family on board at the time who were saved with the crew. The tug is valued at $4,000, and is owned by C. W. Ganthier, of Detroit. No insurance.

The schooner Home has gone into winter quarters at Toledo.

The stembarge Ira Chaffee will winter in Black river near Rush & Son's dock.

The steambarge Oscoda, during the past season, made forty-four round trips, as follows: Forty-one between Oscoda and Cleveland, one between Oscoda and Chicago, and two between Detroit and Buffalo, carrying grain cargoes on the last two trips. Her average cargo of lumber was 650,000 feet.

Vessel men are giving the river above Seventh street bridge a wide berth this fall.

The steamboat Tempest, after receiving her new boiler at Love & Schofield's, went into Dunford & Alverson's drydock where she is receiving a new shoe and having her bottom calked.

Captain Robt. H. Wallace, a Port Huron boy of enterprising disposition, whose folks are now living in Chicago, was in the city Saturday and went over to Chicago on the evening train. He has been sailing the steambarge Genesee Chief, which laid up in Detroit Friday.

Henry Thomas, of Sarnia, brother of Captain Ed. Thomas, of the steamer Grace Dormer, died at his residence on Saturday last after a short illness. The deceased was 35 years of age and was well thought of by all who knew him.

The tug Hand left Sunday, November 18, and the work of construction on the harbor at Sand Beach was officially closed on the day before. The dredge keeps digging away yet.

The steambarge C. H. Green and consorts ran hard aground at the stake near the Canadian Club House, St. Clair flats on the 27th ult. The tug Mocking Bird pulled them off.

William Duncan, a wheelman on the propeller Quebec, was drowned Sunday night by falling from a ferryboat.

SARNIA.

Special to the Marine Record.

The schooner Cataract has arrived from Georgian Bay Captain Glass says it is no place for a sailing craft after the 20th November. B. H. C.

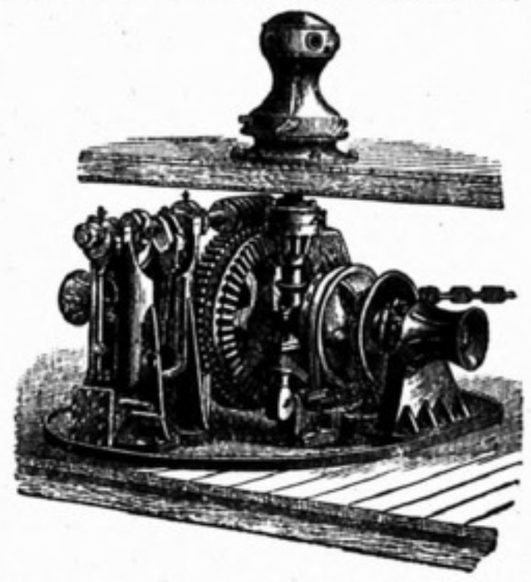
OSWEGO.

The schooner Philo Bennett, Captain O'Hagan from South Bay, arrived at Big Sodus at 8 o'clock Saturday afternoon and came in here at six o'clock all right. Captain O'Hagan will leave for home as soon as possible and will no doubt be the last to leave port this season.

The W. J. Saffel came in at four o'clock Monday forenoon with four jibs gone. The schooner had worked down the lake and the wind came from the west and drove him back. The main gaff topsail was sent down and bent as a jib and the schooner finally got in safely.

THE PROVIDENCE STEAM CAPSTAN WINDLASS.

The grand dimensions, for a lake steamer, of the steamship Australasia, launched during the present season at the shipyard of James Davidson, West Bay City, necessitated the use of the most approved and efficient modern machinery, for her successful and perfect working, chief among which we find the Providence steam capstan windlass, new style, for working her anchors, with its valuable auxiliary, a steam capstan aft, for working the lines, which, by the way, is a new and valuable feature on the great northern lakes. It is safe to say, in this connection that, as the needs of our rivers and harbors are being more generously recognized by Congress, a larger class of steamers will hereafter be built, when the steam capstan aft must come into more uni-



versal use on account of its true, imperative merits, in addition to its great economy in the number of seamen necessary to work a ship, which, in lake traffic, is a great expense to the vessel owner. Captain Davidson, owner and builder of the Australasia, and who sailed her on her first trip from Bay City and Oscoda, with 3,150 tons of freight, in an interview with our Chicago representative, said: "The Providence steam capstan aft will do the work of twenty men, and that he would not be without it, as a matter of convenience and economy for any consideration. He held that it would be an invaluable addition to her machinery in managing his consorts, for handling his lines, in warping up to dock, backing and turning around in a narrow channel, and for handling his steamer in a rapid current." The American Ship Windlass Co. cannot be too highly commended for the improvements they have made on the crude machine that was in use two score years ago, by either the owner and master or the sailor. Their machines have come into use so generally, many thousands having been placed, that we rarely hear of loss of life from imperfect windlasses, as the man in the locker is in comparative security while stowing away the chain, every portion of the windlass being perfect and reliable. In fact, these windlasses are so well constructed to meet their uses and designs that many attempts have been made to imitate them, all of which have, however, failed ignominiously, the imitations having been rendered useless by efforts to avoid liability for infringement, through poor workmanship and material or lack of practical knowledge of the requirements of a good machine.

No better evidence can be adduced regarding the high estimation in which the Providence capstans and windlasses are held by ship owners and builders on the lakes than the fact that all passenger and freight boats launched during the past eighteen months have, with but two exceptions, been fitted with the Providence windlasses.

THE FISHING INDUSTRY OF NEW ENGLAND.—NO. II.

GLOUCESTER, MASS., December 8.

Special Correspondence of the Marine Record.

I might write of many remarkable escapes which have been related to me, but I shall briefly mention only one or two. Perhaps the most wonderful of all was the capsizing of the Nova Scotia schooner Codseeker, off Cape Sable, May 9, 1877, with the supposed loss of all the crew except the captain and cook, who saved themselves in a dory. The schooner was struck under the weather quarter by a sea and gradually careened over on her beam ends, in which position she remained, and all who were below were supposed to have been drowned, so no one but the "old man" and the "doctor" made any attempt to escape. These two managed to get into the dory, which drifted down to leeward so fast they were unable to pull back to see if their shipmates could be rescued. With a heavy sea and a powerful blast behind them, they scudded before the wind until they reached the shore through the dangerous surf. After arriving they told their story and bemoaned the loss of vessel and comrades, as they fully supposed the vessel had gone down with those imprisoned in her cabin and forecastle. Three days afterward the schooner was sighted by a passing vessel, still on her beam ends, and their attention was attracted by voices which appeared to come from where the vessel was lying, to windward. Wishing to satisfy himself, the skipper sent a boat up to board her, and to their surprise found two men imprisoned in a floating tomb, the forecastle, where they had suffered the most dreadful agony of mind and body, lest they should be left to die in that prison, of hunger and thirst, without being able to extricate themselves.

Another incident of the dreadful suffering to which Gloucester fishermen are sometimes subjected was related to me by one of the actors himself, a man who has, perhaps, endured more agony, both mental and physical, than any other man living—without a single finger left on either of his hands, all frozen off by the icy blast which swept over the wintry sea, upon which he was cast adrift, helpless and hopeless, in an open boat. The schooner Grace L. Fears, of Gloucester, Mass., proceeded to the Burgeo Bank in pursuit of halibut, on the 25th of January, 1883, and her crew started out in their dories, from the vessel's side, to haul their trawl lines, which had previously been set. In one of the boats were Howard Blackburn and Thomas Welsh, both young and able-bodied men. When they left the vessel's side it was calm and just beginning to snow. Soon after a light breeze sprang up from the southeast and rapidly augmented in force, while the snow fell thick and fast, shutting the little dory and its occupants within a narrow circle, beyond which nothing could be seen. During the time that these poor fellows were getting in their gear the wind changed, in a squall, from southeast to northwest, bringing the dory to leeward of the vessel, and what was even worse, confusing the men as to the direction in which the schooner bore from them. The anchor was now let go, but it was blowing so hard that it did not fetch up, and they drifted away to leeward. Night at last set in, and imagination can scarcely picture the terrible struggle and fight for life which followed. In relating this narrative to me, Howard Blackburn, holding up his two fingerless hands, said, "No man ever fought harder or longer for life than I did," and I believe every word of it. After three days and nights in an open boat, on a raging sea, without a bit of food or water, his companion, Welsh, died of cold and hunger. Words are inadequate to describe the feelings of Blackburn when he found himself alone on the vast expanse of water with a frozen corpse, and glassy eyes staring upward as though supplicating for mercy and deliverance from the cruel waves. When the fourth night came on the sea ran higher than before, and poor Blackburn was kept bailing his frail craft out continually, to prevent her from being swamped. The sides of the boat were an inch thick with ice, and even the oilskins of the unfortunate fisherman were covered with a glaze of ice, caused by the water which had dashed over the boat. When daylight of the next day appeared a thrill of joy warmed the chilled blood of the hapless mariner when he beheld the high and barren hills of the Newfoundland coast under his lee. Before night he had drifted close in shore and up a small river, but to his bitter disappointment and grief, found no signs of life or animation. In this pitiable condition he was fortunately discovered by some villagers who were crossing the little cove on ice, and a glance at the man was enough to tell the story. They immediately carried him to their home and nourished and clothed him, but all his fingers were frozen and dropped off from dry rot, or what is known as gangrene. He had passed five days exposed to the rigors of an almost arctic clime in wid-winter, without a morsel of nourishment, enough to freeze up any man's whole body, much less his fingers. When he reached Gloucester a sum of nearly $500 was collected for him, chiefly by the Messrs. Proctor Bothers, and a little store given him, which has been the means of his support ever since.

To return to the subject of my article. In the department of fishing industries the march of scientific inquiry has already borne good fruit. The influence of the weather, or more properly speaking, of the variations of temperature on the plentifulness or scarcity of our food fishes, has grown in importance as an element in determining the success or failure of the herring fishery, for example. Thus the teachings of the formerly despised "science" are beginning to bear fruit and to be openly and fully recognized, and in the future the fishermen, as a result of the generalizations just alluded to, may be able to determine, with tolerable accuracy, before setting sail for the fishing grounds, the chances of a successful or unsuccessful day's labor. Add to this, that with the increased knowledge of the conditions of life, development and general history of our food fishes, wise legislation may provide for the protection of the fishes and for the determination of the proper periods for the exercise of the fisher's art, and it will be owned that the gain from a scientific investigation of the fishing industries is simply incalculable. Within the the last quarter of a century the cod, mackerel and halibut fisheries have risen to be a most important national industry and source of wealth to the country, the value of a catch in a single year being many millions of dollars. Needing no cultivation, the sea yields an annual harvest almost incredible in amount. Of course much capital is embarked, but without the hardihood and daring risks encountered by the fishermen, all would be unavailing. Still, when we witness the risks taken by men ashore—the firemen, for instance—in the discharge of their duty, we do not wonder so much that there are those who prefer to fight out the battle of life on the water instead of on the land, because the ocean needs no tilling, whereas the land has to be actually coaxed before it will sometimes bear even a scanty crop, after it has yielded fruit for a generation or more.

While viewing a wild part of their coast I beheld an opening in a rock, which appeared like the entrance to a disused mine. It might, perhaps, have been the opening to a cavern, many of which were made in the time of the buccaneers, (made famous in poetry by Richard H. Dana) for storing smuggled goods and stolen cargo. The yellow sand lay thick upon the sparkling floor which composed the shore, and one would not be surprised, while looking down at the base of the rocky grotto, to see Ferdinand and Miranda playing at chess before the entrance to a sea-worn cave. Looking seaward the waves were showing frills of foam; but so much the better for it is ill fishing in a calm. When the heavens produce a "mackerel sky" the sea is full of life and animation, but an Irishman's hurricane, as the fishermen call a calm, makes the cod's liver torpid and prevents the oil from lubricating his system.

The shoal of mackerel which comes upon the coast in its season often extends five or six miles, darkening the sea with its depth and density, the school containing millions of fish weighing hundreds of tons. Formerly a watch was kept from one of the hills for their expected approach, and a signal was given by sounding a horn, which was repeated from headland to headland, to call the men to their boats. But now the sea gulls are found to be faithful and unerring guides, their appearance and cries indicating the whereabout of the fish. These birds will follow the boats for miles and miles, and the men not unfrequently keep them on their track for days together by throwing a piece of fish or fat to them from time to time.

Much has been written about the superstition of fishermen, but I find that it is greatly exaggerated. A few of them believe in unlucky men, or Jonahs, as they term them, and once a man is known to be such he might as well stay ashore. Several years ago an owner of vessels, who hated and scouted the idea of superstition, had a schooner keel laid on Friday, launched her on Friday, named her the (Good) Friday, sent her to sea on Friday to catch a Friday's dinner (fish) for her Roman Catholic crew of thirteen (the sailors superstious number,) and she returned, strange to say, on the Friday three weeks following, with a full fare.

G. FOSTER HOWELL.

The Canadian passenger propeller City of Owen Sound is ashore at Michipicotin River, Lake Superior. She left Collingwood on November 12 with a full cargo of merchandise for Michipicotin. It is thought that she has gone to pieces during the preset storm, as she has been ashore some time. She is owned by A. M. Smith and others of Toronto, was built in 1875 at Owen Sound, measures 598 tons, and rates A1½. She is insured for $30,000, half of which is in the hull pool.

TUGS CARRYING PASSENGERS.

The Supervising Inspector General of steam vessels has written the following letter in reference to the crews of vessels carried by towboats in the harbor of Chicago:

OFFICE OF SUPERVISING INSPECTOR GENERAL OF STEAM VESSELS, WASHINGTON, Dec. 3.—To the Hon. Hugh McCulloch—Sir: I have the honor to acknowledge the receipt of a communication from the Collector of Customs at Chicago, Ill., transmitting a statement and denial of the "Vessel Owners' Towing Company," owners of the tug Union of that port, that said steamer had committed an alleged violation of section 4,499 Revised Statutes of the United States, the specific charge in the case being that she had carried passengers in violation of title 52, Revised Statutes, the whole being referred to this office by indorsement for examination and recommendation. After careful examination of the case I find, in substance, that the steamer complained of is engaged in the towing business in the harbor of Chicago, and that in the pursuit of that business it has been customary after towing vessels to points in the city of Chicago along the line of the Chicago river, running through that city, to carry the crews of such vessels back to points in the city accessible to the street cars, also carrying the crews back from the same points to the vessel when the latter is ready again to be towed out of the harbor, and it is claimed that persons so carried are not passengers in the sense contemplated in the statutes alleged to have been violated, it being assumed that no pecuniary benefit is derived by the steamers for the carriage of the persons indicated. The position taken by the owners of the union is sustained by an opinion of the Attorney General of the United States, dated July 26, 1883, when in considering an exactly similar case to the one under consideration, except in location, decided that the tugboat in question can not be called a "passenger vessel" or "a vessel carrying passengers," within the statutes.

From a personal inspection of the Chicago river within the limits of the city of Chicago and the methods of the towing business therein and its necessaries, made during a recent official visit there, Supervising Inspector General became satisfied that the carriage of crews to and from vessels by tugboats engaged in commerce in that harbor was an absolute necessity in the interests of the commerce of the city; that the size and construction of the tugboats engaged there, and the nature of the navigation, owing to the many bridges they were obliged to pass through with their tows made it simply an impossibility to equip them as passenger steamers, particularly in the matter of lifeboats. It is, therefore, recommended in view of the circumstances of the case and the decision of the Attorney General previously referred to that the case be dismissed and that the collector of customs at Chicago be directed to instruct his officers not to entertain complaints against tugboats for carrying passengers in any case where the alleged passengers are the crews of vessels towed by such tugs and are carried without pecuniary considerations. Very respectfully,

JAMES A. DUMONT.
Supervising Inspector General.

SPEEDY STEAMERS.

The Belleville Inteligencer, in speaking of the speed of the different bay steamers, referring especially to the respective claims of the Varuna, Reindeer and Hero to the supremacy, settles the question as follows: As the latter boat was swinging into the dock at Deseronto the Reindeer passed out en route for Picton. When freight and passengers had been discharged and received, and the Hero was again under way, the Reindeer had a lead of fully a mile and a half, some thought more. Both boats, it was understood, carried the usual head of steam. The Hero passed the Reindeer before the Picton harbor was reached and was at the dock first. This fact certainly proves the Hero to be much the faster boat. We may add that the distance between Belleville and Kingston was covered by the latter that day in six hours and fifty minutes, including nine stoppages. Is there another steamer on our inland waters of equal dimensions that can lower this record." The Hero is evidently the "Greyhound of the bay."

The Ogdensburg and Lake Champlain Company has been operating a fleet of steamers between Chicago and Ogdensburg for two years. It is by all odds the finest fleet of vessels which ever plied in that trade, not excepting even the old Northern Transit Line of steamers. Their propellers are new and large and swift, and were constructed on the guarantee of the Dominion government to keep the canal at a uniform depth of thirteen feet. During the season their boats have suffered damaging delays, and have been put to great expense in lightering cargoes. The company has threatened to withdraw the vessels next season if something is not done by the Dominion government to remedy the evil complained of. When the new canal was completed it was hailed as the greatest innovation in the history of lake commerce. It was to give the largest class of steamers and sail vessels an opportunity to run between Chicago and Ogdensburg, a trade that had been controlled by the canalers. The expected innovation has fallen through.

THE NAVY.

The report of the Secretary of the Navy exhibits the progress which has been made on the new steel cruisers authorized by the acts of August 5, 1882, and March 3, 1883. Of the four vessels under contract, one, the Chicago of 4,500 tons, is more than half finished; the Atlanta, 3,000 tons, has been successfully launched, and her machinery is now fitting; the Boston, also of 3,000 tons, is ready for launching, and the Dolphin, a dispatch steamer of 1,500 tons, is ready for delivery. Certain adverse criticisms upon the designs of these cruisers are discussed by the secretary, who insists that the correctness of the conclusions reached by the advisory board and by the department has been demonstrated by the recent development in ship building aboard. The machinery of the double turreted monitors Puritan, Terror, and Amphitheater contracted for under the act of March 3, 1883, it in process of construction. No work has been done during the past year on their armor for lack of the necessary appropriations. A fourth monitor, the Monadnock, still remains unfinished at the navy yary in California. It is recommended that early steps be taken to complete the vessel, and to provide also an armament for the monitor Miantonomoh The recommendations of the naval advisory board, approved by the department, comprise the construction of one steel cruiser of 4,500 tons, one cruiser of 3,000 tons, two heavily armed gunboats, one light cruising gunboat, one dispatch vessel, armed with Hotchkiss cannon, one armed ram, and three torpedo boats. The general designs, all of which are calculated to meet the existing wants of the service, are now well advanced, and the construction of the vessels can be undertaken, as soon as you shall grant the necessary authority.

NAT GOODWIN'S YACHT.

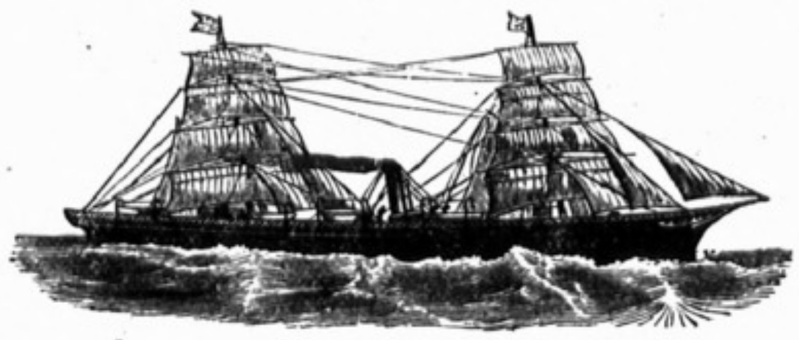
Mr. Goodwin is an honored member of the famous Hull yacht club, of Boston, and the experiences of his yacht have been so numerous that they would fill tomes to overflowing. His yacht is, not inappropriately, named the Sinker, and it is justly considered the most remarkable craft on the Atlantic coast. Whenever Mr. Goodwin sets sail in it his Boston friends buy pools on the chances of his ever showing up again. It is worthy of note that the chances of never returning are invariably the favorite in the pools. Mr. Goodwin tells us, and we are inclined to believe him, that his yacht is the only sailing vessel in American waters that can jump a fence. He says that whenever he leaves the Boston wharf and heads the Sinker for the mighty expanse of brine due east, every tug in the harbor gets up steam and gives chase, it seeming to be a friendly rivalry among the tugs to see who will earn the $10 and the honor of conveying the Sinker back into port when it staves a hole in its hold, or splits its mizzenmast or looses its boom, or disables its rudder, or meets with any one of the misfortunes which appear to be inevitable when Mr. Goodwin is in practical command. "When I have my new yacht built," says Mr. Goodwin, "I shall have it constructed on ingenious plans which are the result of a long and eventful experience. It will be so devised and built as to be capable of shutting up like an accordeon whenever it strikes a rock or a sandbar. In this way all disaster will be averted, and I will be spared the humiliation and expenses of liquidating the damages which now attend every cruise of the Sinker."—*Chicago News.*

The Continental Insurance Company has entered on the aggressive in the insurance complications of the "Big Four," by the service of an attachment on the Union Insurance Company, of Philadelphia. The Continental held an acceptance from the Union for $12,000 on a hull-pool settlement, payable to L. Dimick & Bother as general agents of the Continental. Application was made to the Union for payment, but they refused to recognize the paper, and Dimick & Brother began suit against them in the name of the Continental. The sheriff on the 20th served the papers on Messrs. Crosby & Gunning, general agents of the Union, together with a levy on all money and papers held by the defendants belonging to the Union and the office furniture. A large amount of money, held by Smith & Davis, the pool managers, and the Merchant's Bank, was also levied on.

The United States steamer Boston was successfully launched at Roach's shipyard at 1:30 p. m. on the 4th instant. The members of the Naval Advisory board went aboard, and a large number of naval officers witnessed the launch. The Boston is 286 feet over all, 270 feet on the water line, 42 feet beam, 28 feet depth of hold, and her displacement is 3,500 tons.

The steamer Essex, of Loughhead's Ferry Line, was taken to the Wolverine drydock for repairs on Monday. The fireman remained in charge, and steam was kept up until Thursday afternoon. Thursday night the watchman at the drydocks discovered the vessel on fire. Despite the strenuous exertions of the firemen the upper works were completely destroyed. Loss about $3,000, partly covered by insurance.

GLOBE SHIPBUILDING CO.,



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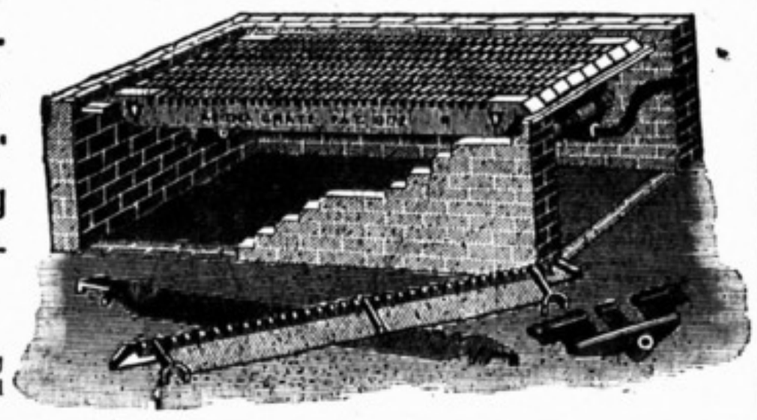

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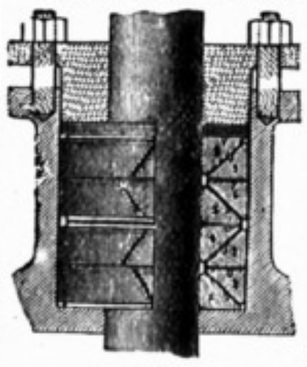

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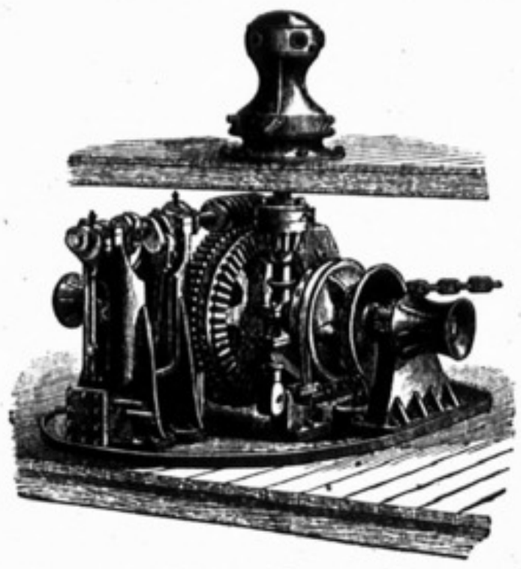

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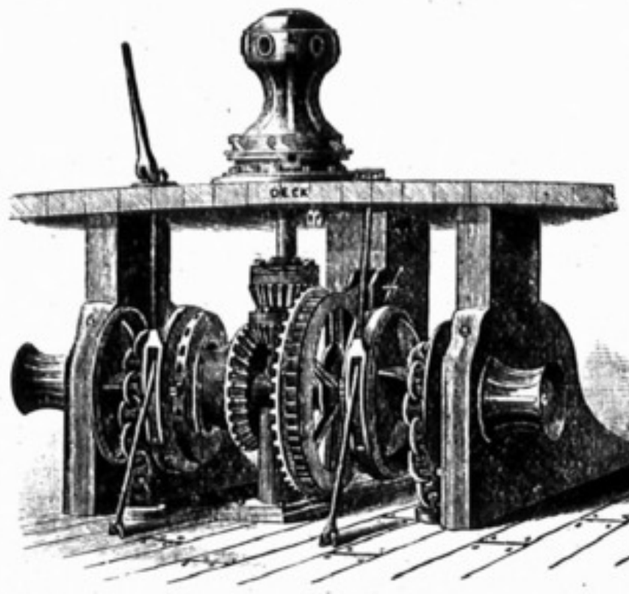

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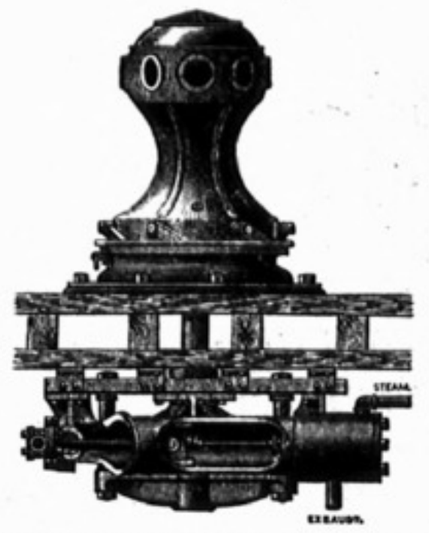

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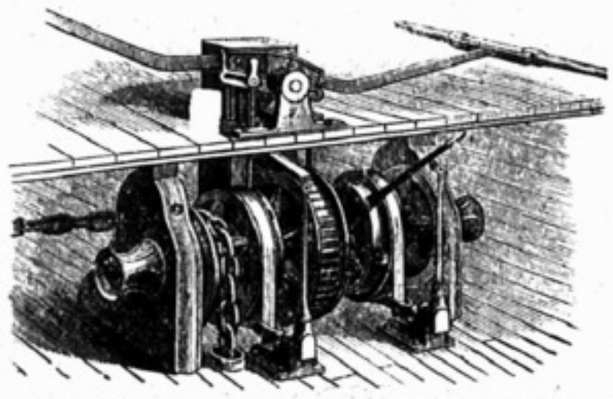

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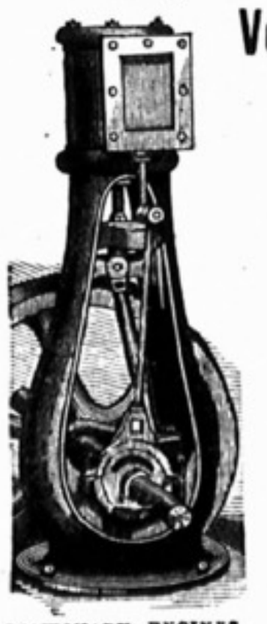

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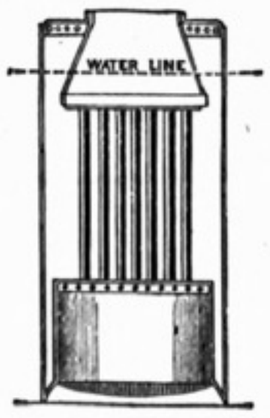

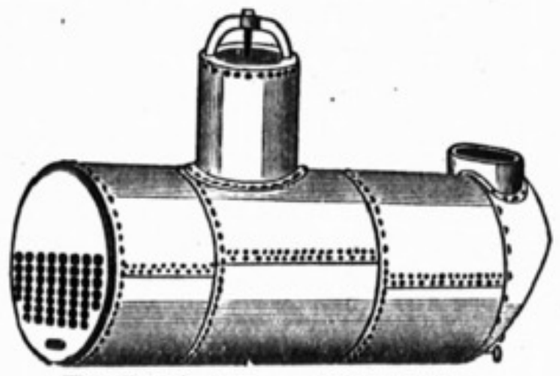

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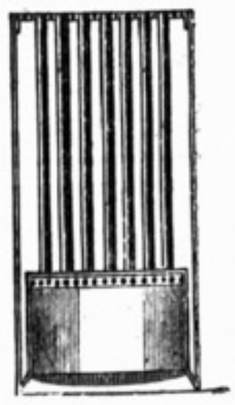

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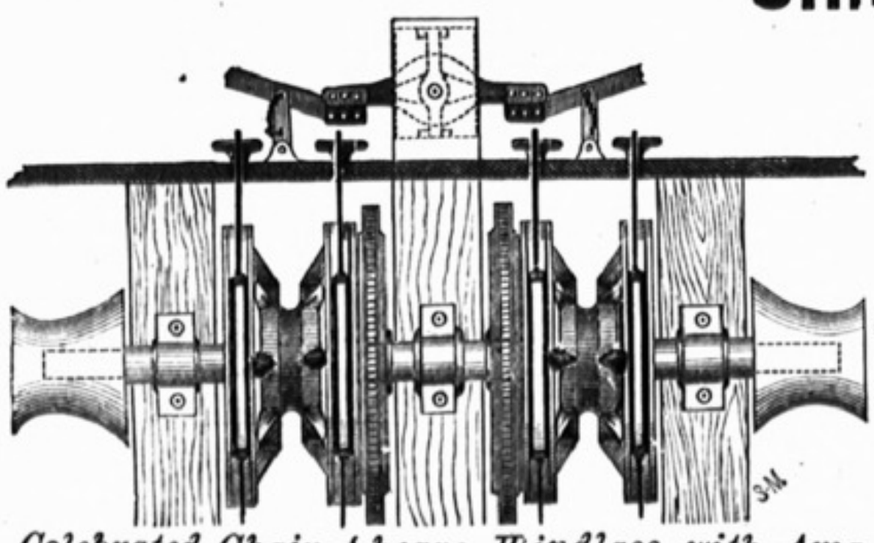

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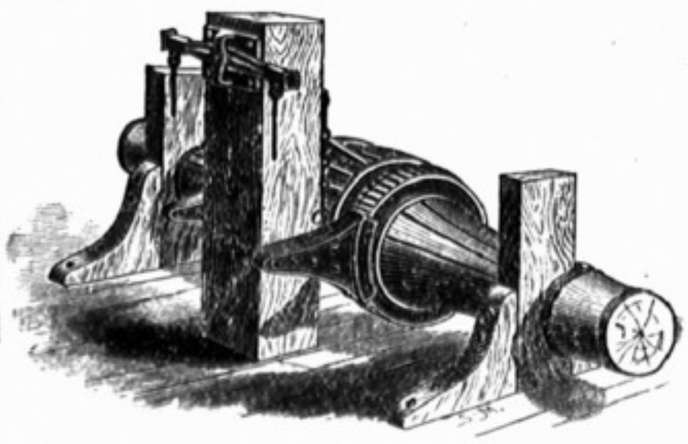
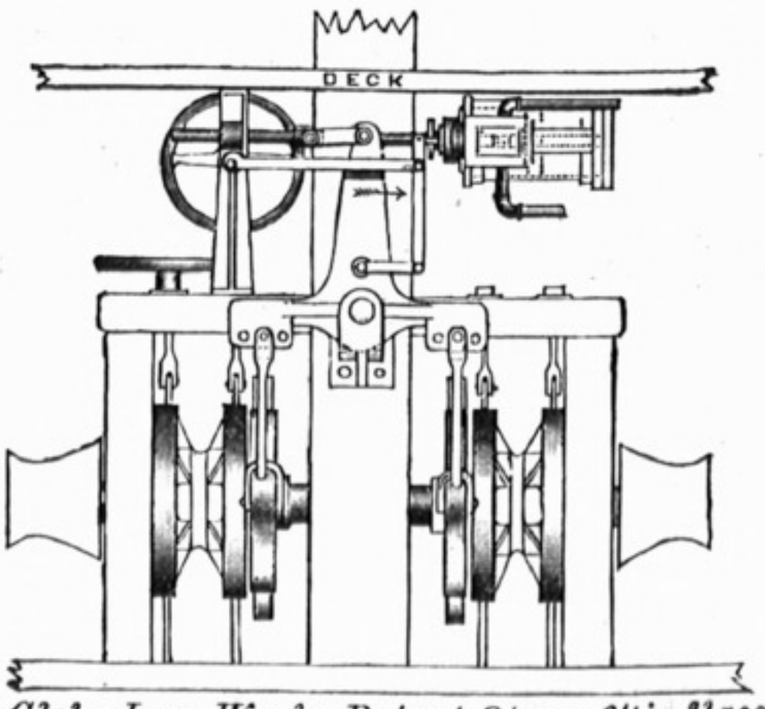


The Common Patent Windlass.



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